Serial No. 09/808,060 Page 2 of 7

IN THE CLAIMS

1. (currently amended) A network relay apparatus comprising:

a routing information gathering unit for determining the maximum transmission unit of a transmission path along a route over which packets are to be transmitted;

a combining unit for assembling a combined packet by combining packets up to a length that does not exceed the maximum transmission unit of said transmission path; and

a routing processing unit for excluding a path along a shortest route to a same destination, comparing maximum transmission units of a remaining plurality of transmission paths to the same destination, and selecting a path having the largest maximum transmission unit as a path for said combined packet from among a the remaining plurality of transmission paths to the same destination, wherein

said routing processing unit selects a path having the largest maximum transmission unit as a path for said-combined packet from among a plurality of transmission paths to the same destination by excluding the path along the shortest route.

2. (original) An apparatus according to claim 1, wherein said combined packet carries as a destination address the address of an endpoint of the route over which said packets are transmitted in combined form, said apparatus further comprising:

a disassembling unit for disassembling a received combined packet into individual packets if the destination address of said received combined packet matches the address of said apparatus.

3. - 4. (canceled) 84216981_1.DOC

Serial No. 09/808,060 Page 3 of 7

- 5. (original) An apparatus according to claim 1, further comprising a combine allow/disallow determining unit for determining, based on a packet attribute, whether or not said combining unit should be made to combine packets.
- 6. (original) An apparatus according to claim 1, further comprising a reassembling unit for disassembling a received combined packet into individual packets and reassembling the same into a combined packet of a length not exceeding the maximum transmission unit of the currently selected path if the length of said received combined packet exceeds said maximum transmission unit.
- 7. (currently amended) A method of combining packets, comprising the steps of: determining the maximum transmission unit of a transmission path along a route over which packets are to be transmitted;

assembling a combined packet by combining packets up to a length that does not exceed the maximum transmission unit of said transmission path; and

excluding a path along a shortest route to a same destination;

comparing maximum transmission units of a remaining plurality of transmission paths to the same destination; and

selecting a path having the a largest maximum transmission unit as a path for said combined packet from among athe remaining plurality of transmission paths to the same destination, wherein

84216981_1.DOC

Serial No. 09/808,060

Page 4 of 7

in said selecting stop, a path having the largest maximum transmission-unit is selected as a path-for said combined packet from among a plurality of transmission-paths to the same destination by excluding the path along the shortest route.

8. (original) A method according to claim 7, wherein said combined packet carries as a destination address the address of an endpoint of the route over which said packets are transmitted in combined form, said method further comprising the step of:

disassembling a received combined packet into individual packets if the destination address of said received combined packet matches the address of an apparatus that received said combined packet.

- 9. 10. (canceled)
- 11. (original) A method according to claim 7, further comprising the step of determining, based on a packet attribute, whether to combine or not combine packets.
- 12. (original) A method according to claim 7, further comprising the step of disassembling a received combined packet into individual packets and reassembling the same into a combined packet of a length not exceeding the maximum transmission unit of the currently selected path if the length of said received combined packet exceeds said maximum transmission unit.

84216981 1.DOC